Attorney's Docket: 2002DE444

Serial No.: N/A

Art Unit N/A

Preliminary Amendment

This listing of claims will replace all prior versions, and listings of claims in the application:

- 1.(Currently Amended) A fuel oil comprising a larger proportion of middle distillate distillates having a sulfur content of at most 350 ppm and an aromatics content of at most 22% by weight, and also a smaller proportion of at least one copolymer of ethylene and vinyl esters, said copolymer containing comprising components
- a) bivalent structural units derived from ethylene of the formula 1

b) from 5 to 12 mol% of bivalent structural units of the formula 2

where R1 is saturated, branched C5-C18-alkyl, and

c) from 4 to 13 mol% of bivalent structural units of the formula 3

and the wherein a sum of the molar proportion proportions of comonomers b) and c) structural units of the formulae 2 and 3 being is between 12 and 16 mol%.

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- 2.(Currently Amended)) A fuel oil as claimed in The fuel oil of claim 1, wherein the molar proportion of the comonomer branched vinyl ester b) is between 5 and 11 mol%.
- 3.(Currently Amended) [[A]] <u>The</u> fuel oil as claimed in of claim 1 and/or 2, wherein the molar proportion of vinyl acetate comonomer c) is between 4.6 and 9 mol%.
- 4.(Currently Amended) The fuel oil of claim 1A fuel oil as claimed in one or more of claims 1 to 3, wherein the comonomers b) present are comonomer b) is a vinyl ester esters of branched carboxylic acids having from 5 to 15 carbon atoms.
- 5.(Currently Amended) The fuel oil of claim 1A fuel oil as claimed in one or more of claims 1 to 4, wherein the copolymer further comprises copolymers, in addition to the structural units referred to as a), b) and c), contain up to 5 mol% of \underline{a} further comonomer comonomers selected from the group consisting of olefins having from 3 to 18 carbon atoms, esters of acrylic acid or methacrylic acid with C_1-C_{18} -alcohols, [[and]] C_1-C_{18} -alkyl vinyl ethers, and mixtures thereof.
- 6.(Currently Amended) The fuel oil of claim 1A fuel oil as claimed in one or more of claims 1 to 5, wherein the copolymer has a molecular weight copolymers have molecular weights (by GPC against poly(styrene)) of from 3000 to 15 000 g/mol.
- 7.(Currently Amended) The fuel oil of claim 1 A fuel oil as claimed in one or more of claims 1 to 6, wherein the copolymer has a degree of branching of the copolymer backbone determined by means of NMR [[is]] between 2 and 9 CH₃/100 CH₂ groups, not taking into account the methyl groups of the comonomers.
- 8.(Currently Amended) The fuel oil of claim 1A fuel oil as claimed in one or more of claims 1 to 7, wherein the copolymers have a melt viscosity viscosities at 140°C of from 20 to 10 000 mPas.

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9.(Currently Amended) The fuel oil of claim 1A fuel oil as claimed in one or more of claims 1 to 8, wherein the total content of aromatics in the middle distillate has an aromatic content is below 18% by weight.

10.(Currently Amended) The fuel oil of claim 1A fuel oil as claimed in one or more of claims 1 to 9, wherein the middle distillate has a 90-20% boiling range of less than 110°C.

11.(Currently Amended) The fuel oil of claim 1A fuel oil as claimed in one or more of claims 1 to 10, wherein the middle distillate has a paraffin content by DSC of more than 3% by weight of precipitated paraffins at 10°C below the cloud point.

12.(Currently Amended) The fuel oil of claim 1A fuel oil as claimed in one or more of claims 1 to 11, wherein the middle distillate has a density of less than 0.840 g/cm³.

13.(Currently Amended) The fuel oil of claim 1A fuel oil as claimed in one or more of claims 1 to 12, wherein the middle distillate additionally comprises at least one further ethylene-vinyl ester copolymer.

14.(Currently Amended) The fuel oil of claim 1A fuel oil as claimed in one or more of claims 1 to 12, wherein the middle distillate additionally comprises at least one polar nitrogen compound.

The fuel oil of claim 1 A fuel oil as claimed in one or more 15.(Currently Amended) of claims 1 to 12, wherein the middle distillate additionally comprises at least one alkylphenol-aldehyde resin.

16.(Currently Amended) The fuel oil of claim 1 A fuel oil as claimed in one or more of claims 1 to 12, wherein the middle distillate additionally comprises at least one comb polymer.

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17.(Currently Amended) The fuel oil of claim 1 A fuel oil as claimed in one or more of claims 1 to 12, wherein the middle distillate additionally comprises at least one polyoxyalkylene derivative.

18.(Currently Amended) A copolymer of ethylene and vinyl esters comprising comonomers

a) bivalent structural units derived from ethylene of the formula 1

b) from 5 to 12 mol% of bivalent structural units of the formula 2

where R1 is saturated, branched C5-C18-alkyl, and

from 4 to 13 mol% of bivalent structural units of the formula 3 c)

and the wherein a sum of [[the]] molar proportions of structural units of the formulae 2 and 3 being is between 12 and 16 mol%.

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19.(Currently Amended) The use of copolymers as claimed in claim 18 A method for improving the cold flow behavior of a middle distillate distillates, said method comprising adding to said middle distillate having a sulfur content of at most 350 ppm and an aromatics content of at most 22% by weight said copolymer of claim 18.

- 20.(New) The method of claim 19, wherein the molar proportion of the comonomer b) is between 5 and 11 mol%.
- 21.(New) The method of claim 19, wherein the molar proportion of comonomer c) is between 4.6 and 9 mol%.
- 22.(New) The method of claim 19, wherein the comonomer b) is a vinyl ester of branched carboxylic acids having from 5 to 15 carbon atoms.
- 23.(New) The method of claim 19, wherein the copolymer further comprises up to 5 mol% of a further comonomer selected from the group consisting of olefins having from 3 to 18 carbon atoms, esters of acrylic acid or methacrylic acid with C_1 – C_{18} -alcohols, C_1 - C_{18} -alkyl vinyl ethers, and mixtures thereof.
- 24.(New) The method of claim 19, wherein the copolymer has a molecular weight (by GPC against poly(styrene)) of from 3000 to 15 000 g/mol.
- 25.(New) The method of claim 19, wherein the copolymer has a degree of branching determined by means of NMR between 2 and 9 CH₃/100 CH₂ groups, not taking into account the methyl groups of the comonomers.
- 26.(New) The method of claim 19, wherein the copolymer has a melt viscosity at 140°C of from 20 to 10 000 mPas.
- 27.(New) The method of claim 19, wherein the aromatic content in the middle distillate is below 18% by weight.

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28.(New) The method of claim 19, wherein the middle distillate has a 90-20% boiling range of less than 110°C.

29.(New) The method of claim 19, wherein the middle distillate has a paraffin content by DSC of more than 3% by weight of precipitated paraffins at 10°C below the cloud point.

30.(New) The method of claim 19, wherein the middle distillate has a density of less than 0.840 g/cm³.